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Dräger medical

A Dräger and Siemens Company

Field Service Procedure

Part Number: SP00255 Rev: B Date: 19 December 2003 © 2003 Draeger Medical, Inc.

Fabius GS[®] Kit Software Version 1.3N Upgrade

Fabius GS Software Version 1.3N Upgrade

INSTALLATION PROCEDURE

NOTE: This procedure includes installation of a new ventilator lid with an -8mbar auxiliary air valve, and a new silicone ventilator hose.

NOTE: The screen illustrations contained in this document are for reference only and therefore may or may not reflect the software version being installed.

- 1. Set the power switch to OFF and disconnect AC power from the machine.
- 2. Remove and discard the existing ventilator hose.
- 3. Open the ventilator door and disconnect the small diameter tube from the hose barb on the ventilator lid.
- 4. Loosen the three clamps holding the ventilator lid.
- 5. Remove the existing patient lid. See NOTE below for disposition instructions.

NOTE: Non-U.S. Installations - Discard patient lid.

NOTE: U.S. Installations - The original patient lid (P/N 2600775-001) must be returned to DMI within seven (7) days of update. To facilitate the process, please contact your DMI Customer Service Representative to obtain a Return Material Authorization (RMA) number for the return of original patient lid.

6. Install a sleeve (P/N 4117958) in the rear hole of the ventilator housing near the hinge as shown in Figure 1.

NOTE: Installation of the sleeve prevents use of ventilator lids with two large locating pins. (w/ -3 mbar air valves)

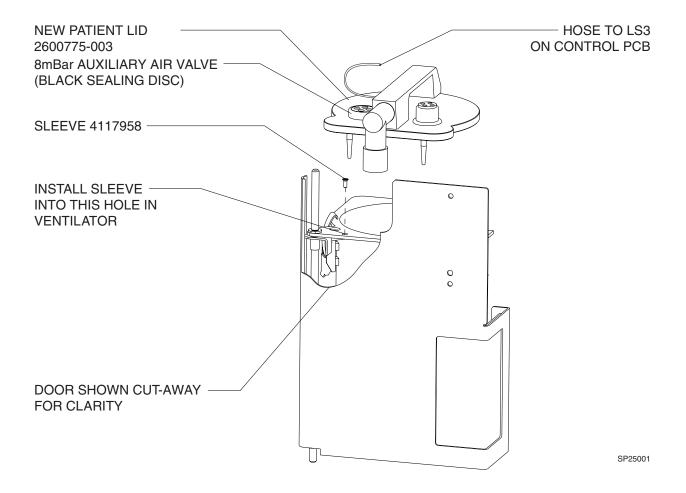


FIGURE 1. Ventilator Lid Installation

- 7. Install the new ventilator lid (P/N 2600775-003) and secure it with the three clamps.
- 8. Reconnect the small diameter tube to the hose barb on the ventilator lid.

9. Close the ventilator door and install the new silicone ventilator hose (P/N 4117590). See Figure 2.

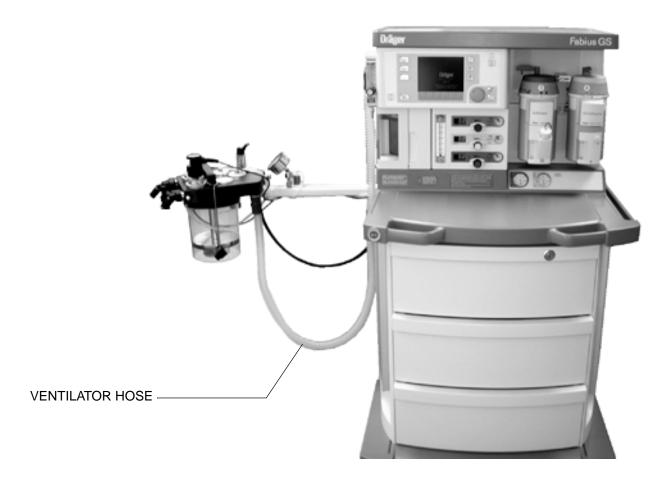


FIGURE 2. Ventilator Hose Installation

10. Restore power to the machine.

Installing Send Image (utility) file on laptop. (If applicable)

NOTE: If the 'SendImage' icon exists, proceed to 'Updating Send Image' Section on page 7.

- 1. Turn on the PC and insert the software media in the appropriate drive.
- 2. Minimize all programs and check desktop area for the following icon.



3. Using Windows Explorer double click on the appropriate drive.



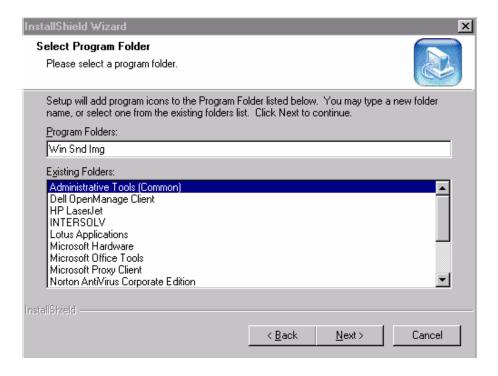
- 4. Double click on the 'send_image_install' file.
- 5. Double click on the 'Setup.exe' file.



6. Verify the following 'InstallShield Wizard' screen appears and the Destination Folder is C:. Choose 'Next'.



7. Choose 'Next' to the following screen.



8. The following screen shall appear. Choose 'Finish'. Proceed to 'Updating Send Image (utility) file' Section on page 7.



Updating Send Image (utility) file.

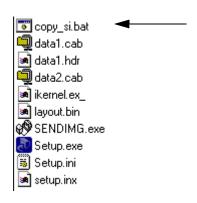
1. Minimize all programs and verify the 'Send Image' icon is located on the desktop.



2. Using Windows Explorer, double click on the appropriate drive and open the 'send_image_install' file.



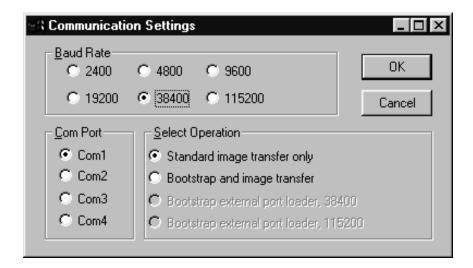
3. Double click on the 'copy_si.bat' file. This updates your current 'Send Image' file to the latest version. Proceed to 'Performing Software Download' section on page 8.



Performing Software Download.

NOTE: Verify the machine power is in the OFF position.

 From desktop, double-click the new icon named 'SENDIMG' or 'send_img'. The 'Communications Settings' screen will appear. Configure the 'Communications Settings' as follows:



2. Press Enter or click OK. Connect the download cable from Com1 on the laptop computer to the serial interface port on the Fabius GS. See Figure 3.

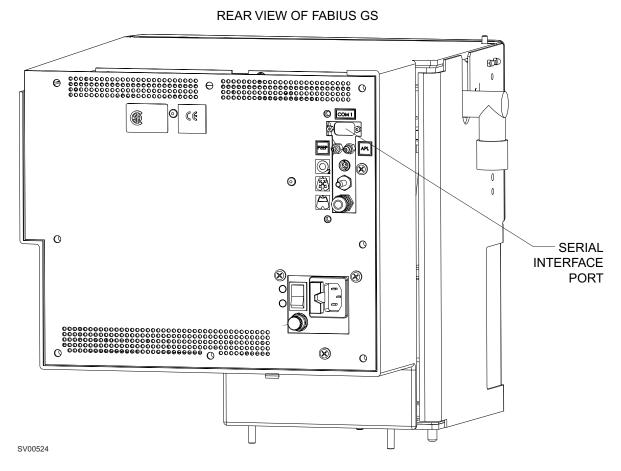
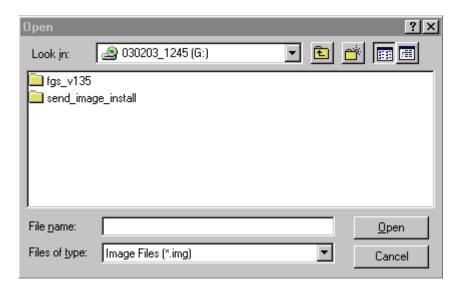
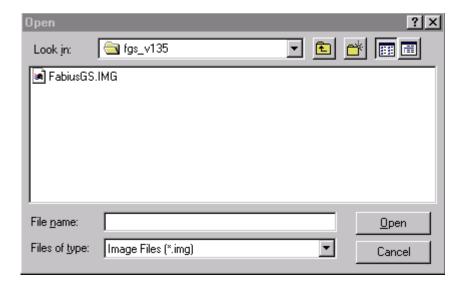


FIGURE 3. Fabius GS Serial Port Location

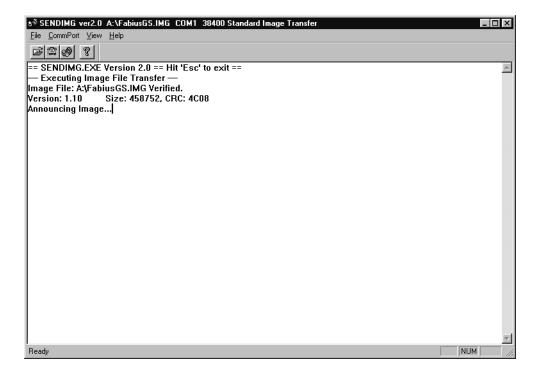
3. From the drop-down box, select the CD Drive.



4. Double click the 'software image' folder (fgs_vxxx). The 'Fabius GS.IMG' is displayed.



Double-click the '.IMG' file or single-click (highlight), then press 'Enter'. The following screen will be displayed:



- 6. Set the machine's power switch to ON. The download process will start immediately.
- 7. As the software is downloading, programming blocks will appear on the machine display. See Figure 4. When the download is complete and successful, the display will appear as shown in Figure 5. If the download is unsuccessful, the display will appear as shown in Figure 6.

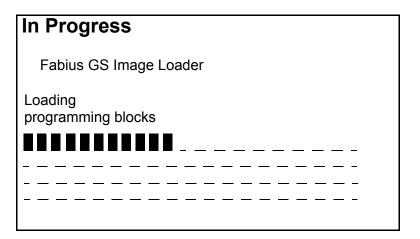


FIGURE 4. Image Loader Screen

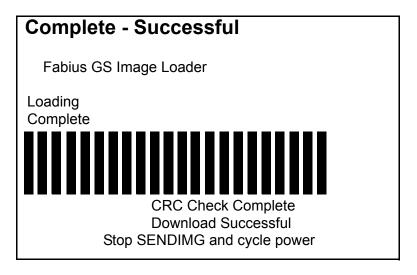


FIGURE 5. Image Loader Successful

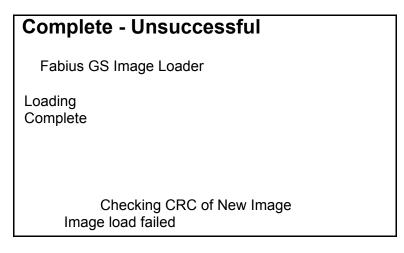


FIGURE 6. Image Loader Unsuccessful

- 8. Set the power switch on the Fabius GS to OFF. Close the PC loader screen and power down the PC. Disconnect the interface cable.
- Switch machine power to ON and verify all self-diagnostics indicate a Pass condition, except for NAVRAM. The NAVRAM test may indicate a FAIL condition during the initial System Diagnostics after a successful software download.

NOTE: The NAVRAM test shall indicate a PASS condition after performing an additional power cycle.

- 10. Access the appropriate service screens (see Section 7.5 of the Fabius GS Service Manual) and update the machine serial number, clear service log and reset hours run. The machine serial number is located on the rear of the machine.
- 11. Perform PMS test Steps 7.6, 7.7, 7.17, 7.18, 7.20 and 7.21 in Section 7 of the Fabius GS Service Manual. Verify the correct market kit settings are entered per original machine configuration or customer requirements. See Table 1.

NOTE: To change the language and pressure measurement units, the "Market Selection" must be changed to "Non-U.S." (see Section 4 of the Fabius GS Service Manual).

Table 1: Market Kit Settings

	O2 Whistle	Language	Date Format	Time Format	O2 Position	Alarm Sounds	Pres. Units
USA	Disabled	English	M/D/Y	12 Hour	Right	Drager	cmH2O
UK/Ireland	Enabled	UK English	D/M/Y	24 Hour	Left	EN740	mbar
France	Enabled	French	D/M/Y	24 Hour	Left	EN740	mbar
Germany	Enabled	German	D/M/Y	24 Hour	Left	EN740	mbar
Spain	Enabled	Spanish	D/M/Y	24 Hour	Left	EN740	mbar
Poland	Enabled	Polish	D/M/Y	24 Hour	Left	EN740	mbar
Italy	Enabled	Italian	D/M/Y	24 Hour	Left	EN740	mbar
Netherlands	Enabled	Dutch	D/M/Y	24 Hour	Left	EN740	mbar
Russia	Enabled	Russian	D/M/Y	24 Hour	Left	EN740	mbar
Sweden	Enabled	Swedish	D/M/Y	24 Hour	Left	EN740	mbar
Romania	Enabled	Romanian	D/M/Y	24 Hour	Left	EN740	mbar
Canada	Enabled	English	M/D/Y	12 Hour	Right	Drager	cmH2O
Egypt	Enabled	English	D/M/Y	24 Hour	Left	EN740	mbar
Mexico	Enabled	Spanish	D/M/Y	24 Hour	Right	Drager	mbar
Australia	Enabled	English	D/M/Y	24 Hour	Left	EN740	mbar
Hungary	Enabled	Hungarian	D/M/Y	24 Hour	Left	EN740	mbar
Turkey/Yugoslavia	Enabled	UK English	D/M/Y	24 Hour	Left	EN740	mbar
Belgium/Luxembourg	Enabled	French	D/M/Y	24 Hour	Left	Drager	mbar
Brazil	Enabled	Portuguese	D/M/Y	24 Hour	Right	EN740	mbar
Bulgaria/Finland	Enabled	UK English	D/M/Y	24 Hour	Left	EN740	mbar
Chile	Enabled	Spanish	D/M/Y	24 Hour	Right	EN740	mbar
Croatia	Enabled	Croation	D/M/Y	24 Hour	Left	EN740	mbar
Cuba	Enabled	Spanish	D/M/Y	24 Hour	Right	Drager	mbar
Czech Republic	Enabled	Czech	D/M/Y	24 Hour	Left	EN740	mbar
Guam/Somoa	Enabled	UK English	D/M/Y	24 Hour	Left	EN740	mbar
Jamaica	Enabled	UK English	D/M/Y	24 Hour	Left	EN740	mbar
Paraguay	Enabled	Spanish	D/M/Y	24 Hour	Right	EN740	mbar
Portugal	Enabled	Portuguese	D/M/Y	24 Hour	Left	EN740	mbar
Slovania	Enabled	Slovak	D/M/Y	24 Hour	Left	EN740	mbar
Switzerland	Enabled	German	D/M/Y	24 Hour	Left	EN740	mbar
Thailand	Enabled	UK English	D/M/Y	24 Hour	Left	EN740	mbar
Uraguay	Enabled	Spanish	D/M/Y	24 Hour	Right	Drager	mbar
Vietnam	Enabled	UK English	D/M/Y	24 Hour	Right	EN740	mbar
Argentina	Enabled	Spanish	D/M/Y	24 Hour	Right	Drager	cmH2O

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DrägerService is a division of Draeger Medical, Inc. 3122 Commerce Drive Telford, PA 18969 Tel: (215) 721-5402 (800) 543-5047 Fax:(215) 721-5784 Web: www.draegermedical.com Printed in the U.S.A.